Madison Paper Industries	**)**	**Department**
Somerset County	**)**	**Findings of Fact and Order**
Madison, Maine	**)**	**Part 70 Air Emission License**
A-427-70-A-I	**)**	

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Madison Paper Industries
LICENSE NUMBER	A-427-70-A-I
LICENSE TYPE	Initial Part 70 License
NAICS CODE	322121 Paper Mills
NATURE OF BUSINESS	Mechanical pulp and supercalendered paper production facility
FACILITY LOCATION	Main Street, Madison
DATE OF LICENSE ISSUANCE	September 25, 2003
LICENSE EXPIRATION DATE	September 25, 2008

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
Boiler 4	119 MMBtu/hr	#6 oil fired boiler, 2% S
Boiler 6	99.6 MMBtu/hr	#6 oil fired boiler, 2% S
Boiler 7	117 MMBtu/hr	#6 oil fired boiler, 0.5% S
Groundwood Process	300 tons/day groundwood fiber	5 grinders, 5 shredders, 2 un-screened stock tanks, 2 refiner vents, heat recovery system
Paper Machine 3	750 tons/day paper	Paper machine
No. 6 Fuel Oil Tank	50,000 gallons	fixed roof, steel tank
No. 6 Fuel Oil Tank	50,000 gallons	fixed roof, steel tank
No. 6 Fuel Oil Tank	50,000 gallons	fixed roof, steel tank
PCC Plant	N/A	Carbonators, tanks & lime silo
Parts Washers	<20 gallons each unit	N/A

The listed capacities within the Findings of Fact of this license are referenced for the purpose of description only. Capacities that are determined to be a license limit are listed as such within the Order of this license.

Madison Paper Industries has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in Madison Paper Industries Part 70 license application and in Appendix B of Chapter 140 of the Department's regulations.

Previously, Madison Paper Industries had been licensed to construct two new boilers and a new paper machine in addition to the units above. The new facility was not constructed within the 18 month licensing timeframe and there are no foreseeable plans for construction, therefore the proposed expansion is not included in this license.

When the proposed Part 63 Boiler Maximum Achievable Control Technology (MACT) rule is finalized, Madison Paper Industries may be required to submit an amendment to this license to include any applicable terms and conditions.

C. Application Classification

The application for Madison Paper Industries does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Description

Madison Paper Industries manufactures pulp and paper. Pulp is produced at the facility's groundwood operations. Logs are delivered by truck, stored, sawn and debarked. The wood then enters the facility and is processed under heat and pressure using grinders and shredders.

Paper is produced using pulp from the groundwood mill and pulp purchased from other facilities. The pulp is used on paper machine 3.

The three oil fired boilers provide steam for the processes, building heat, and electrical generation. All three exhaust through a common stack. A portion of the boilers' exhaust is routed through a precipitated calcium carbonate (PCC) plant located on site. The PCC plant is owned and operated by Specialty Minerals. After passing through the PCC plant, the exhaust is vented up the common stack through a separate flue.

B. Boiler 4, oil boiler

Unit Description
Boiler 4 was manufactured by Combustion Engineering in 1967 and has a Coen low NO_x oil burner. The maximum input capacity is 119 MMBtu/hr, 793 gal/hr. The #6 fuel oil is limited to a maximum sulfur content of 2.0%. For boiler startup, #2 fuel oil is used. A small amount of specification waste oil generated on site is also burned. The boiler was installed in 1967, prior to the New Source Performance Standards (NSPS) 40 CFR (Code of Federal Regulations), Part 60, Subpart Db applicability date for steam generating units greater than 100 MMBtu/hr. Emissions exit through a common 250 ft stack.

Emission control equipment on boiler 4 is the low NO_x burners. Emission limits for boiler 4 are based on previous licensed BPT limits. Because of the installation of low NO_x burners Madison Paper Industries has met the requirements of Chapter 138 NO_x Reasonably Available Control Technology (RACT).

Streamlining

Periodic Monitoring
Periodic monitoring shall consist of recordkeeping of fuel use through purchase receipts indicating the type of fuel, amount (gallons) delivered and certificates of analysis showing percent sulfur by weight of the fuel delivered. The fuel records shall be kept on a monthly and a 12 month rolling total basis.

Madison Paper Industries shall operate an O_2 monitor on boiler 4 and shall record the O_2 levels at least once per shift. The O_2 monitor is not subject to the requirements of Chapter 117 of the Department's regulations.

Continuous Opacity Monitoring
Continuous monitoring for boiler 4 consists of the operation and maintenance of an opacity monitor. The specification monitor shall be operated in accordance with the applicable requirements of Chapter 117 of the Department's regulations.

C. Boiler #6, oil boiler

Unit Description
Boiler 6 was manufactured by Nebraska Boiler Co., Inc. in 1980 and has a Coen low NO_x oil burner. The maximum input capacity is 99.6 MMBtu/hr, 666 gal/hr. The #6 fuel oil is limited to a maximum sulfur content of 2.0%. For boiler startup, #2 fuel oil is used. A small amount of specification waste oil generated on site is also burned. The boiler was installed in 1981, prior to the NSPS 40 CFR Part 60, Subpart Dc applicability date for steam generating units between 10 and 100 MMBtu/hr. Emissions exit through a common 250 ft stack.

Emission control equipment on boiler 6 is low NO_X burners. Emission limits for boiler 6 are based on previous licensed BPT limits. Because of the installation of low NO_x burners Madison Paper Industries has met the requirements of Chapter 138 NO_x RACT.

Streamlining

Periodic Monitoring
Periodic monitoring shall consist of recordkeeping of fuel use through purchase receipts indicating the type of fuel, amount (gallons) delivered and certificates of analysis showing percent sulfur by weight of the fuel delivered. The fuel records shall be kept on a monthly and a 12 month rolling total basis.

Madison Paper Industries shall operate an O_2 monitor on boiler 6 and shall record the O_2 levels at least once per shift. The O_2 monitor is not subject to the requirements of Chapter 117 of the Department's regulations.

D. Boiler 7, oil boiler

Unit Description
Boiler 7 was manufactured by Nebraska Boiler Co., Inc. in 1991 and has a Todd Combustion low NO_x oil burner. The maximum input capacity is 117 MMBtu/hr, 780 gal/hr. The boiler was installed in 1991 and is subject to NSPS 40 CFR Part 60, Subpart Db. The boiler's heat input capacity and furnace volume qualify it for the high heat release rate NO_x standard. The #6 fuel oil is limited to a maximum sulfur content of 0.5%. For boiler startup, #2 fuel oil is used. Emissions exit through a common 250 ft stack.

Emission control equipment on boiler 7 are the low NO_X burners, and flue gas recirculation. Madison Paper is also required to operate and maintain continuous emission monitoring systems (CEMs) for NO_X and O_2 (or CO_2). Emissions from boiler 7 were based on previous licensed BACT limits. Because of the installation of low NO_x burners Madison Paper Industries has met the requirements of Chapter 138 NO_x RACT.

Streamlining

SO_2
Madison Paper Industries accepts streamlining for SO_2 requirements. Chapter 106 of the Department's regulations and 40 CFR Part 60, Subpart Db requirements are applicable. The Subpart Db SO_2 limit is more stringent, therefore only the more stringent Subpart Db SO_2 limit is included in this license.

Opacity
Madison Paper Industries accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(a)(i) of the Department's regulations and 40 CFR Part 60, Subpart Db requirements are applicable. The Subpart Db opacity limit is more stringent, therefore only the more stringent Subpart Db opacity limit is included in this license.

Periodic Monitoring
Periodic monitoring shall consist of recordkeeping of fuel use through purchase receipts indicating the type of fuel, amount (gallons) delivered and certificates of analysis showing percent sulfur by weight of the fuel delivered. The fuel records shall be kept on a monthly and a 12 month rolling total basis.

Continuous Opacity/Continuous Emission Monitoring
Continuous monitoring for boiler 7 consists of the operation and maintenance of NO_X and O_2 (or CO_2) CEMS. Madison Paper shall also operate and maintain a specification opacity monitor on boiler 7. The specification monitors shall be operated in accordance with the applicable requirements of Chapter 117 of the Department's regulations and 40 CFR Part 60.

E. Groundwood Process

Unit Description
The groundwood process includes five grinders, five shredders, two unscreened stock tanks, two refiner vents, and a heat recovery system. The groundwood equipment was installed in 1981. An expansion was licensed in 1996. The wood goes through the grinders and then through the shredders which are enclosed to operate above atmospheric pressure at elevated temperature. After the grinders, the ground stock, water, steam, and resultant gases go into the unscreened stock tank. Periodically, the unscreened stock tank vents to the blow seal tank to prevent over pressurization. From the unscreened stock tank, the unvented gas flow continues through a cyclone where fiber is recovered and returned to the process. Flash steam and gases exit to a barometric condenser. The condenser utilizes fresh steam and water to condense organics as well as to recover heat from the exhaust gases. Materials which do not condense (ie. excess flash steam) are vented to the atmosphere after passing through a secondary condenser. Groundwood from the unscreened stock tank is screened and further processed into acceptable pulp for papermaking. There are no chemicals integral to the process; only a minor amount of defoamer is used.

The MACT for mechanical pulping and other non-chemical pulp mills adopted by EPA on April 15, 1998 (see 63 Fed. Reg. 18526) does not require any air emission controls on the groundwood process.

VOC Reasonably Available Control Technology (RACT)
Previously, a Chapter 134 VOC RACT analysis was performed on the groundwood operations. The primary VOC emission points were found to be the blow seal tank vents and the condenser system vent.

Madison Paper Industries conducted stack tests to quantify VOC emissions from these sources. The test performed included the grinding process emissions and one of the reject refiner vents. Using the mass rate from the test and the maximum facility production rate, VOC emissions from the groundwood process were calculated to be 23.5 ton/year. Based on the information submitted, the Department determined that the groundwood operations were below the VOC RACT threshold value of 40 tons/year. However if groundwood operations are modified such that VOC emissions are increased, Madison Paper Industries may be required to submit an amendment which addresses any changes in the VOC emissions.

F. Paper Machine #3

Unit Description
Madison Paper Industries operates a paper machine, installed in 1981, to produce supercalendered paper. The raw materials used include wood fiber and inorganic filler. Small quantities of defoamer, biocide, cleaning compounds, starch, sodium hydrosulfite (brightener), retention aids, and dyes are also used.

Chapter 134 (Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds) of the Department's regulations exempt paper machine area emissions from VOC RACT.

G. Fuel Oil Tanks

Unit Description
Three fixed roof #6 fuel oil tanks, each with a 50,000 gallon capacity, are located at Madison Paper Industries. The oil is delivered by truck, loaded into the tanks and piped to the boilers. Two of the tanks were installed in 1987 and the third tank was installed in 1990. These fuel oil tanks are exempt from 40 CFR Part 60, Subpart A by 40 CFR 60.110b(c) because the maximum true vapor pressure of the #6 fuel oil is less than 3.5 Kpa.

Periodic Monitoring
Periodic monitoring shall consist of keeping records of the dimensions and capacity of the storage tanks for the life of the tanks, per 40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

H. Parts Washers

Unit Description
Madison Paper Industries currently operates cold parts cleaners each with capacities less than 20 gallons. These cold parts cleaners are subject to Chapter 130 of the Department's regulations.

Periodic Monitoring
Periodic monitoring for the degreaser units shall consist of recordkeeping including records of the type and amount of solvent added.

I. Precipitated Calcium Carbonate Plant

Unit Description
Madison Paper Industries has a contract with Specialty Minerals under which Specialty Minerals constructed, owns, and operates a precipitated calcium carbonate (PCC) plant on land leased from Madison Paper Industries. Madison Paper Industries is responsible for ensuring compliance with air emission requirements applicable to the PCC plant. The PCC plant was constructed in April 1998. The license amendment for the PCC plant finds the plant to be a minor source not subject to New Source Review.

The three boilers at Madison Paper Industries emit CO_2, one of the raw materials used in the PCC manufacturing process. Some of the exhaust gases from the boilers are routed through the PCC process and then exhausted out through a new separate flue added to the current stack. When in operation, the PCC plant uses approximately 30% of the flue gas output of the three boilers.

The raw materials for manufacturing PCC are lime (calcium oxide), carbon dioxide from the boilers' flue gases, and process water from Madison Paper Industry's water system. The CO_2 flue gas enters a carbonation tank (carbonator) containing slaked lime. The slaked lime is obtained by mixing water and calcium oxide. After PCC is produced in the carbonation tanks, the product slurry is wet screened to remove undesirable grit particles and transferred to storage tanks. The PCC slurry is then used as filler in the paper making operation.

Emission controls on the PCC plant are the two stage demisters on the carbonators and a baghouse on the lime silo. However, the baghouse exhaust is currently piped back into the bottom of the silo and has no external emission point.

Periodic Monitoring
Periodic monitoring for the two stage demisters on the carbonators shall consist of recordkeeping in a maintenance log the date and location of all malfunctions as

well as all routine maintenance. The log shall be kept at the Specialty Minerals plant.

J. Insignificant Emission Sources

Previously, Madison Paper Industries had licensed the Boilerhouse Fire Pump and Groundwood Fire Pump which were fired with 0.5% sulfur diesel fuel. Madison Paper Industries has converted to firing 0.05% sulfur diesel fuel in these pumps and since these pumps are under 3 MMBtu/hr they are considered insignificant activities for this license. Madison Paper Industries is required to maintain records of fuel type and sulfur content by weight fired in each pump.

K. Facility Licensed Emissions

Facility emissions were calculated based on an annual fuel limit of 11,000,000 gallons per year (12 month rolling total) of fuel oil and an annual sulfur dioxide limit of 1276 tons/year for the boilers. The following is the sum of all emission limits in this license for all equipment listed in Section I.B. This information is used to calculate license fees. Facility emissions are limited to the following:

Total Allowable Annual Emissions for the Facility

EMISSION UNIT	PM	PM_{10}	SO_2	NO_X	CO	VOC
Boilers 4, 6, and 7	135	135	1276	371	100	8
Groundwood Process	-	-	-	-	-	39
TOTALS	**135**	**135**	**1276**	**371**	**100**	**47**

III. AIR QUALITY ANALYSIS

Madison Paper Industries previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this Initial Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-427-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.
All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Madison Paper Industries pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Standard Statements

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated October 25, 1996:

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
A.	Boiler #4 O_2 system	Chapter 117	Source Surveillance	Used for operational purposes, not a spec. monitor
B.	Boiler #6 O_2 system	Chapter 117	Source Surveillance	Used for operational purposes, not a spec. monitor
C.	Boilers #4,6, & 7	40 CFR Parts 72 through 78	EPA Acid Rain Program	Facility is not an electric utility unit.
D.	No.6 fuel oil tanks	Chapter 134	VOC RACT	Facility < 40 ton VOC/year is exempt.
E.	Paper Machine #3	Chapter 134	VOC RACT	Paper machine area emissions exempt.
F.	Facility	Chapter 134	VOC RACT	Groundwood mill is limited to less than 40 ton VOC/year. Other fuel burning equipment is exempt.

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

(a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

(b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

(c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

(d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

Standard Conditions

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:

(i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

(ii) to demonstrate compliance with the applicable emission standards; or

(iii)pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(c) submit a written report to the Department within thirty (30) days from date of test completion.

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

(a) The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

(b) The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

(c) All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;

(b) The compliance status;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source;

SPECIAL CONDITIONS

(14) **Boiler 4**

A. Boiler 4 shall fire #6 or #2 fuel oil with a sulfur content not to exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from boiler 4 shall not exceed the following limits:

Pollutant	Limit	Origin and Authority	Enforceability
PM	0.20 lb/MMBtu	MEDEP, Chapter 103, Section 2(A)(1)	-
NO_X	0.45 lb/MMBtu	MEDEP Chapter 140, BPT	**Enforceable by State-only**

Pollutant	Limit	Origin and Authority	Enforceability
PM	23.8 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
PM_{10}	23.8 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
SO_2	249 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
NO_X	53.5 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
CO	4.2 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
VOC	1.1 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**

C. Madison Paper Industries shall operate boiler 4 such that visible emissions from the boiler shall not exceed 30% opacity on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101, Opacity]

(15) **Boiler 6**

A. Boiler 6 shall fire #6 or #2 fuel oil with a sulfur content not to exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from boiler 6 shall not exceed the following limits:

Pollutant	Limit	Origin and Authority	Enforceability
PM	0.20 lb/MMBtu	MEDEP, Chapter 103, Section 2(A)(1)	-
NO_X	0.45 lb/MMBtu	MEDEP Chapter 140, BPT	**Enforceable by State-only**

Pollutant	Limit	Origin and Authority	Enforceability
PM	10.0 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
PM_{10}	10.0 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
SO_2	209 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
NO_X	44.8 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
CO	3.5 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**
VOC	0.9 lb/hr	MEDEP Chapter 140, BPT	**Enforceable by State-only**

C. Madison Paper Industries shall operate boiler 6 such that visible emissions from the boiler shall not exceed 30% opacity on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101, Opacity]

(16) **Boiler 7**

A. Boiler 7 shall fire #6 or #2 fuel oil with a sulfur content not to exceed 0.5% by weight demonstrated by purchase records from the supplier. [40 CFR, Part 60, Subpart Db]

B. Emissions from boiler 7 shall not exceed the following limits:

Pollutant	Limit	Origin and Authority	Enforceability
PM	0.08 lb/MMBtu	MEDEP, Chapter 103, Section 2(A)(1)	-
NO_X *	0.40 lb/MMBtu	40CFR Part 60, Subpart Db	-
SO_2	0.50 lb/MMBtu	40CFR Part 60, Subpart Db	-

* The NO_X lb/MMBtu limit shall be based on a 30 day rolling average basis.

Pollutant	Limit	Origin and Authority	Enforceability
PM	9.4 lb/hr	MEDEP Chapter 140, BPT	-
PM_{10}	9.4 lb/hr	MEDEP Chapter 140, BPT	-
SO_2	61.23 lb/hr	MEDEP Chapter 140, BPT	-
NO_X +	46.8 lb/hr	MEDEP Chapter 140, BPT	-
CO	19.9 lb/hr	MEDEP Chapter 140, BPT	-
VOC	1.1 lb/hr	MEDEP Chapter 140, BPT	-

+ The NO_X lb/hr limit shall be based on a 24 hour block average basis, excluding periods of startup, shutdown and malfunction.

  The 30 day rolling average shall be calculated and updated in 24 hour blocks in which a 24 hour block constitutes one calendar day. The 24 hour block average shall be calculated as one calendar day, midnight to midnight.

C. Madison Paper Industries shall operate boiler 7 such that visible emissions from the boiler shall not exceed 20% opacity on a six (6) minute block average basis except for one (1) six (6) minute block average per hour of not more than 27%. [40 CFR, Part 60, Subpart Db]

D. Madison Paper Industries is subject to the requirements of 40 CFR, Part 60, Subparts A and Db.

E. The licensee shall operate boiler 7 with a low NO_X burner and flue gas recirculation to optimize NO_X emission reduction. Madison Paper Industries shall calibrate, operate, and maintain a gas flow monitor in the recirculation loop, or upon the malfunction of the gas flow monitor, an ampmeter on the flue gas recirculation system fan until the flow monitor is repaired or replaced. [MEDEP Chapter 138, NO_X RACT]

(17) **Fuel Use Limits**

A. Madison Paper Industries shall restrict total fuel use in boilers 4, 6, and 7 to no more than 11,000,000 gallons per year, with annual SO_2 emissions limited to under 1276 tons/year. The following equation shall be used to calculate annual SO_2 emissions on a 12 month rolling total basis:

$$\frac{(157 \text{ lb}/1000 \text{ gal})(x\%\ s)(X \text{ gal/yr \#6 oil})}{2000} + \frac{(142 \text{ lb}/1000\text{gal})(y\%\ s)(Y \text{ gal/yr of \#2 oil})}{2000} \leq 1276 \text{ tpy}$$

where:

x is the weighted average % sulfur in the #6 fuel oil fired in 12 previous months
X is the gallons of #6 fuel oil fired in 12 previous months
y is the weighted average % sulfur in the #2 fuel oil fired in 12 previous months
Y is the gallons of #2 fuel oil fired in 12 previous months
[MEDEP Chapter 140, BPT]

B. Madison Paper Industries shall maintain records of annual fuel use indicating the type of fuel, the quantity of fuel consumed (gallons), the percent (%) sulfur content of the fuel by weight, and the heat content of the fuel, demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

C. Madison Paper Industries may burn specification waste oil in the boilers #4 and #6 provided that the license fuel cap, sulfur content limit, and emission limits are not exceeded. Specification waste oil shall not be burned in boiler #7. A log shall be maintained recording the quantity of all specification waste oil fired in the boilers. The log shall contain a copy of an analysis performed on a representative sample of on-site generated specification waste oil. If off-site generated specification waste oil is used, the log shall contain copies of the analyses preformed on each batch of off-site generated specification waste oil as well as the quantity of specification waste oil fired. The combustion of hazardous waste and the dilution of hazardous waste with non-hazardous products for combustion purposes is prohibited. [MEDEP Chapter 140, BPT]

(18) **Steam Production Limits**

A. Combined steam output from boilers 4 and 6 shall not exceed 152,000 lbs steam/hour (daily average) while boiler 7 is in operation. [MEDEP Chapter 140, BPT]

B. During boiler 7 inactivity, startups, or shutdowns, the combined steam output from boilers 4 and 6 shall not exceed 176,000 lbs steam/hour (daily average). [MEDEP Chapter 140, BPT]

C. Madison Paper Industries shall record hourly steam flows in lbs steam/hr for each boiler at all times of operation. A summary of steam flow data shall be included in the quarterly reports. [MEDEP Chapter 140, BPT] (**Enforceable by State-only**)

(19) **Fuel Oil Tanks**

Madison Paper Industries shall keep records of the dimensions and capacities of the three oil tanks for the life of the tanks. [40 CFR Part 60, Subpart Kb]

(20) **Groundwood Process**

Madison Paper Industries shall maintain records on a twelve-month rolling basis to document that VOC emissions are under 39 tons/year. Madison Paper Industries shall submit a license amendment to the Department if the ground wood operations are modified in a way that VOC emissions are increased above 39 tons/year. [MEDEP Chapter 140, BPT] (**Enforceable by State-only**)

(21) **Precipitated Calcium Carbonate (PCC)**

A. Lime Silo

i. Particulate emissions from the lime silo shall be controlled with a baghouse. Particulate emissions from the lime silo shall be limited to 0.5 lb/hr.

ii. A maintenance log recording the date and location of all bag failures as well as all routine maintenance shall be kept on site. Bag failures

constitute a violation only to the extent the limits in paragraph (iii) below are exceeded.

iii. Visible emissions from the lime silo baghouse shall not exceed 10% opacity on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. Madison Paper Industries shall take corrective action if visible emissions from the baghouse exceeds five (5) percent opacity. Corrective actions shall be recorded in the maintenance log.

B. Carbonators

i. Emissions from the carbonators shall exhaust through demisters then through a separate flue at the existing stack. (**Enforceable by State-only**)

ii. The particulate matter emissions from the PCC plant flue, in combination with particulate matter emissions from the boilers, shall not exceed the existing lb/hr limits applicable to the boilers. (**Enforceable by State-only**)

iii. If the Department requests additional emission testing on the boiler gases after they pass through the PCC plant carbonators, a determination will have to be made at the time of the protocol review on the boiler and PCC plant operation including what portion of the flue gas will be going through the PCC plant, what portion will be going up the existing stack and how the relative amounts of pollutants in each portion of the flue gas streams will be determined. (**Enforceable by State-only**)

iv. In order to document maintenance of the two stage demisters, a maintenance log recording the date and location of all malfunctions as well as all routine maintenance shall be kept on site. (**Enforceable by State-only**)

[MEDEP Chapter 140, BPT]

(22) **Parts Washers**

The parts washers are subject to the operational and record keeping requirements of MEDEP Chapter 130 which include, but are not limited to, the following:

A. Madison Paper Industries shall keep records of the type and amount of solvent added to each parts washer.

B. Madison Paper Industries shall attach a permanent conspicuous label to each unit summarizing the following operational standards of Chapter 130:

1. Equip each cold cleaning degreaser with a cover that is easily operated with one hand if:
   a. the solvent vapor pressure is greater than 15 millimeters of mercury measured at 100 ^{o}F by ASTM D323-89; or,
   b. the solvent is agitated; or,
   c. the solvent is heated.
2. Close the covers on all solvent degreasing tanks when they are not in use;
3. Drain the cleaned parts for at least fifteen (15) seconds or until dripping

stops;

4. If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized or shower-type spray) at a pressure that does not exceed ten (10) pounds per square inch gauge pressure (psig);
5. Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
6. Minimize drafts to less than 40 meters/minute;
7. Refrain from operating the cold cleaning degreaser upon the occurrence of any visible solvent leak until such leak is repaired; and
8. Do not use any halogenated solvents in the degreasing tanks.

. [MEDEP Chapter 130]

(23) **Continuous Emissions Monitor/Continuous Opacity Monitor Requirements**

The CEMS and COMS required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, subsequent amendments, statute, state or federal regulation, as applicable.

A. Madison Paper Industries shall operate the following CEMS and COMS:
   1. Boiler 4 – opacity
   2. Boiler 7 – opacity, NO_X, and O_2 (or CO_2)

B. All CEMS and COMS shall meet the sampling and performance criteria of 40 CFR Section 60.13, and the criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.
   1. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions. [MEDEP Chapter 117]
   2. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.[MEDEP Chapter 117]

C. Madison Paper Industries shall conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.

D. Madison Paper Industries shall develop and maintain an updated written quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

E. The recordkeeping program for CEMS and COMS shall include permanent record of all CEMS and COMS data for a six year period in a manner that is readily accessible, legible and chronological by quarter. The records shall include:

1. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with 40 CFR Part 51, Appendix P; 40 CFR, Part 60, Appendices B and F; and Chapter 117 of the Department's regulations. [MEDEP Chapter 117]
2. Documentation for all measurements, performance evaluations, calibration checks, and maintenance or adjustments of each CEMS or COMS as required by 40 CFR, Part 51 Appendix P. [MEDEP Chapter 117]
3. A report or other data indicative of compliance with the applicable emission standard for those periods when the CEMS or COMS were not in operation or produced invalid data, upon the written request by the Department. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. Evidence indicating normal operations shall constitute such reports or other data indicative of compliance with applicable emission standards. In the event the Bureau of Air Quality does not concur with the licensee's compliance determination, the licensee shall, upon the Bureau of Air Quality's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard; and [MEDEP Chapter 140, BPT]
4. Calculations on a 24 hour block average basis. The 24-hour block average basis shall be calculated as the arithmetic average of not more than 24 - one hour block periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight. A valid 24-hour block average must contain at least 12 hours during which operation occurred. Hours in which no operation occurs shall not be included in the 24-hr block average calculation. [MEDEP Chapter 140, BPT]

(24) **Parameter Monitor Requirements**

A. Madison Paper Industries shall operate the following parameter monitors:

1. Boiler 4 – steam flow
2. Boiler 6 – steam flow
3. Boiler 7 – steam flow

Madison Paper Industries shall record steam flow once per shift or use an ampmeter with a continuous chart recorder.

B. Madison Paper Industries shall operate all parameter monitors such that each parameter monitor must provide accurate and reliable data such that the records in paragraph A above are kept. If the parameter monitor records accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

C. Madison Paper Industries shall keep records of monitor operational status during all source operating time, including specifics for calibration and audits.

D. Madison Paper Industries shall keep documentation for a complete data set of all monitored parameters specified in this condition for a six year period in a manner that is readily accessible, legible and chronological by quarter. All parameter records shall be made available to the Bureau of Air Quality upon request.
[MEDEP Chapter 140,BPT]

(25) **Malfunction, Failure, Downtime Notification**

Madison Paper Industries shall maintain all records of malfunctions, failures, downtimes, and any other changes in operation for all CEMS, COMS, and all equipment parameter monitors required by this Order. If the malfunction, failure, or downtime period of the CEMS, COMS, or equipment parameter monitor is greater than six hours, Madison Paper Industries shall notify the Bureau of Air Quality within two working days (48 hours) of any such malfunction, failure, or downtime. Within 5 working days, the licensee shall submit a written report describing the cause, duration, remedial action, and steps to be taken to prevent reoccurrence of such malfunction, failure, or downtime. [MEDEP Chapter 140,BPT] (**Enforceable by State-only**)

(26) **Boiler Startup and Shutdown Opacity**

For Boilers # 4, 6 and 7, opacity in excess of the limits set forth in this license during the first 4 hours, starting with the first exceedance during the initiation of cold startup or planned shutdown are exempt, provided that operating records are available to demonstrate that the facility was being operated to minimize emissions. Madison Paper Industries shall have the burden of proving that any excess emissions were not caused entirely, or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition. [MEDEP Chapter 101, Opacity]

(27) **Periodic Monitoring**

Madison Paper Industries shall operate and keep records for the following periodic monitors:

1. The flue gas recirculation on Boiler #7 shall be recorded once per shift or use an ampmeter with a continuous chart recorder on the FGR fan.
2. A maintenance log for the PCC plant demisters.
3. The amount of each fuel fired in Boilers #4, #6 and #7 shall be maintained on a monthly and 12 month rolling total basis.
4. The sulfur content of fuel oil fired in Boilers #4, #6 and #7.
5. The sulfur content of specification waste oil fired in Boilers #4 and #6.
6. Record the O_2 levels in Boilers #4 and #6 once per shift.
7. Fuel type and sulfur content by weight logs for each insignificant combustion source.
8. Maintain records of dimensions and capacity of each #6 fuel oil storage tank.
9. The solvent type and amount used in each parts washer.

[MEDEP Chapter 140, BPT]

(28) **Stack Testing**

Madison Paper Industries shall conduct particulate emission testing and demonstrate compliance once every two years on the following:

1. Boiler #4
2. Boiler #6
3. Boiler #7

[MEDEP Chapter 140, BPT]

(29) **Quarterly Report**

Madison Paper Industries shall submit a Quarterly Report to the Bureau of Air Quality and EPA within 30 days after the end of each calendar quarter, detailing the following information for the licensed control equipment, CEMS, COMS, and parameter monitors.

A. All control equipment downtimes and malfunctions.
B. All CEMS and COMS downtimes and malfunctions.
C. All downtimes of the parameter monitors.
D. All excess events of emission and operational limitations set by this Order, statute, regulation, or new source performance standards as appropriate. The following information shall be reported for each emission or operational limit exceeded:
    1. Standard exceeded.
    2. Date, time, and duration of excess event.
    3. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip and print-outs when requested.
    4. A description of the malfunction that caused the excess event.
    5. The strategy employed to minimize the excess event.

6. The strategy employed to prevent reoccurrence.
7. A report certifying there were no excess emissions, if that is the case.

[MEDEP Chapter 117] [40 CFR Subpart Db]

(30) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality and EPA. The semiannual reports are due July 31 and January 31. The initial semiannual report is due January 31, 2004. The semiannual report shall be considered on time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

A. Each semiannual report shall include a summary of the periodic monitoring listed in condition (27).
B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140] [40 CFR Subpart Db]

(31) **Annual Compliance Certification**

Madison Paper Industries shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31st of each year with the initial annual certification due Jan 31, 2004. The annual compliance certification shall be considered on time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. [MEDEP Chapter 140] [40 CFR Part 70 (b)(5)(iv)]

(32) **A. Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1.

B. Toxic Air Pollutants Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall report, no later than September 1, every two years (2004, 2006, etc.) or in a timeframe designated to the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

(33) The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(34) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.

[40 CFR, Part 82, Subpart F]

(35) **Certification by a Responsible Official**
All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(36) Madison Paper Industries shall pay the annual air emission license fee within 30 days of September 30 of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

(37) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 25, 1996
Date of application acceptance: October 28, 1996

Date filed with the Board of Environmental Protection _____

This Order prepared by Kathy Molokie and Jeffrey Kalinich, Bureau of Air Quality.